



WATER & CSD SECTOR

Di Iorio

Di Iorio S.p.A. Group Frosolone, Italy

- >> Stretch-blow moulder SMIFORM SR 14
- >> shrinkwrapper SMIFLEXI SK 602 F
- SMILINE DV 500
- >> conveyors SMILINE

>> divider



Frosolone, land of water between past and future.

Ahead of its time, since its foundation, Di Iorio S.p.A. has built a close-knit relationship with the territory, encouraging the development of cultural-training and economic opportunities that have contributed to the wellbeing and protection of the environment. It is a company that draws its strong points for development and future innovation from traditions.





"To drink water is to drink the environment, to drink Molisia is to drink Molise".

This is the slogan that accompanies the newest PET bottle of Molisia flat water. The innovative image of great appeal has been awarded with the "Agorà d'argento" in that "it is a particularly attractive bottle to look at with those reflections and colours which are seen as signs of purity". The anatomical shape and the original label make it winning packaging". The "lily", logo of the Di lorio company, is placed on relief on the bottle. On the label, a blue heart "embraces" the lush pastures and uncontaminated mountains. Molisia water comes from the "heart" of the lush nature of Molise. The national park of Abruzzo, Lazio and Molise, different protected oases and large wooded areas, above all in the province of Isernia (home to the municipality in which the Di Iorio company is located), are green area of incomparable beauty. Molisia water is taken in the territory of Sant' Elena Sannita, at a height of 850 meters above sea level, within a natural district close to a protected zone of elevated naturalistic interest.



Water, man and the environment



Of all the resources found in the environment, water is certainly the most necessary to humans: all foods contain water; the human body contains large quantities of water; life itself depends on water. Consisting of one oxygen atom and two of hydrogen, it is able to interact with the ecosystem, responding to precise demands.

The role played by water on man equals that which culture plays on the soul and the human mind, which are at the basis of our traditions. Water and culture contribute to social and economic development, to the quality of life, to health and wellbeing in general.

The Italian region of Molise, an uncontaminated land in which "Tradition" and "Culture" live side by side with "Nature", safeguards a source of low mineral content water, Molisia, as pure as its mountains, ideal for healthy "Italian" living.

The water, which flows in this environment, is characterised by a very low saline content and is almost free of sodium and nitrates, an essential factor for healthy eating and which makes the water light and easy to digest. This gift of nature is bottled by the Di lorio family respecting in full the surrounding territory, focusing on energy saving: a business policy closely connected to tradition and the environment,

which has formed the basis of the production activity for over 110 years.



Above: Dr. Gino Di Iorio receives the Agorà d'argento for the flat water "Molisia" bottle.



Di Iorio and SMI

Technological innovation to support tradition



Over recent years
Di lorio has realised an
important update of its
commercial strategy,
launching new beverages
(aperitifs and soft drinks
under the Stappj label)
and above all Molisia water,
which is bottled in modern
high technology plants.

The latter ensure an elevated quality standard and excellent preservation of the finished product.

To satisfy the customers' requests in full, in line with market demands, the company of Molise has

installed a second line for PET bottling, parallel to the installation already existing for glass packaging.

The new bottling line, characterised by the high technological content of the machines, is the most innovative available in this sector.

To realise this important investment Di Iorio has entrusted itself to the experience of SMI, with which it has been collaborating for almost a decade. Entrusting itself to the competence and quality

of SMI products, Di Iorio has made a bet: to realize an all-Italian line, with a high innovative content and technologically advanced. SMI supplies a rotary stretch-blow moulder of 14 cavities, a shrinkwrapper model SK 602F with double lane, integrated logistic systems for handling empty bottles produced by blow moulder SR14, loose bottles and the packages exiting shrinkwrapper SK 602F.

The production potential of the installation is high:

- > 40.000 bph in the 500 ml format of soft drinks
- > 25,600 bph in the 1 litre format of soft drinks
- > 20,000 bph in the 1,5 litre format of soft drinks
- > 24,000 bph in the 1,5 litre format of carbonated water
- > 25,000 bph in the 2 litre format of flat water.

All the machines are managed electronically and have been designed in full compliance with the company's environmental policy. For example, all the motors are equipped with inverter for reduced energy consumption, the





blow moulder is equipped with a device to recover the blowing air, the conveyors are lubricated with silicon material to allow considerable saving on water and reduced emission of phosphoorganic residues into drains.

Maximum attention has been given to the hygienic-sanitary requirements of the entire bottling line, the air conveyors are equipped with suitable filters to prevent contamination of the transported bottles, the filler is hermetically closed (aseptic environment), while the electronic control of the taps assures precise filling of the bottle.

The line has been designed to bottle flat mineral water, carbonated mineral water, flavoured water, carbonated soft drinks and flat soft drinks in bottles of: 500 ml and 1 litre round, 1.5 and 2 litre square (flat mineral water and flat soft drinks); 1.5 and 2 litre round (carbonated mineral water and carbonated soft drinks).

With the entry into operation of the new line, the overall production potential of the Di lorio plants is equal to half a million bottles per shift, or rather, one million five

Technological innovation at the service of the environment

The "R & D" laboratories of Smigroup cover a fundamental role in the process of industrial technological innovation and result in an intense research and development activity to improve the performances of machinery, installations and processes dedicated to production plants of different sectors.



The Smigroup dedicates particular attention to the study of solutions which focus on energy saving, production efficiency and eco-compatibility of products and processes.

The laboratories experiment with new materials, characterised by greater lightness, resistance, workability, cost and ability to be recycled.

The new system to recover the compressed air applied to the machines for stretch-blow moulding of PET containers is important for its reduced environmental impact.

The results in terms of energy saving and respect of the environment are considerable and motivate the choice at the basis of this fully eco-compatible innovation, which reduces the consumption of air by up to 40% and electricity by up to 20%.

hundred thousand bottles every 24 hours.

The potential of the current bottling line is such to be able to satisfy the traditional market and the large-scale retail trade sector.





Since 1896

the culture of healthy drinking.



century of activity under its belt, is nestled among the spectacular mountains of Molise, where the mineral water. essential material for the soft drinks. rises pure. The founder Filippo Di Iorio, and his wife Angela and four children, began the production of soft drinks in 1896 (in particular carbonated soft drinks), exporting its fame worldwide. The tradition and old recipes of the family were handed down from generation to generation until 1985, when the

Di Iorio S.p.A., with over a

Above: The full Di Iorio family celebrates 110 years of business activity.

• Once upon a time... but there is more

Chinotto (non-alcoholic drink produced from the juice of the citrus myrtifolia fruit and other herbal extracts) and gassosa (lemonade) are becoming popular again. The Di Iorio family has celebrated over 110 years of production of gassosa, once widely available (perhaps because of its low cost) and remained in the memory of generations for the "bottle with the ball", predecessor of food design, which has unconsciously become a "phenomenon". Di Iorio exports soft drinks as far away as the United States, Australia and South Africa. To re-launch the chinotto based soft drink, Di Iorio has played on the nostalgia of the Fifties, the years which marked the success of this particular beverage. Today it is considered by many to be a "fashion" drink that makes an all-Italian flavour and product survive abroad.





Below: Historical photo of the Di Iorio family in 1896, the year the business was founded.

current partners Antonio, Gino and Domenico Di Iorio (nephews of the founder), together with their uncle Luigi Di Iorio, moved the current production of the plant to S. Elena Sannita area called "II in the Giardino". In the mid 1990s studies and research were carried out to improve and empower the availability of mineral water and to add a new product to the production of soft drinks already produced: Molisia low mineral content water. Today the plant of 20,000 m2 is among the most

modern, thanks to advanced technology the installations. In fact, the focus of Di Iorio is to continue to produce wholesome natural products with passion. developing the drinking quality, investing in research and in the installations to continue to improve the recipes of the grandfather Filippo Di Iorio.





Above: Mrs. Ernestina, daughter of the founder, at the celebrations for the 110 years of activity of the company.

Wide production range to satisfy every taste

A complete range of products and commercial reliability make Di Iorio S.p.A. a company able to satisfy the demands of the modern market. In Italy and abroad Di Iorio is present with a vast range of products:

- > Soft drinks, prepared with only natural flavours, include:
- Aperitifs (100 ml in glass): Stappino-Bitter, Bianco-Bitter, Rosso-Rabarbaro.
- Soft drinks (in 200, 250, 500, 1000 and 1500 ml formats): gassosa, orange, lemonade, chinotti, tonic water, coffee.
- > The MOLISIA mineral water is bottled in glass formats (250 ml, 500 ml, 750 ml and 1 litre) and in PET formats (500 ml, 1 litre round, 1.5 litre square and round, 2 litre square and round).



• THE WORD TO THE CUSTOMER - Interview with Dr. Gino Di Iorio, Chairman of Di Iorio S.p.A.



Above: Dr. Gino Di Iorio, Chairman of Di Iorio S.p.A. with Paolo Nava, Chairman and General Manager of SMI S.p.A.

What is the key to the success of Di lorio S.p.A. in Italy and abroad?

"Di lorio has always been present on the soft drinks market. The production methods. modernisation installations and technological innovation, together with packaging, which has been and is renewed over time. allows us to offer an excellent quality/price ratio. The company's flexibility at all levels is geared above all to customer satisfaction, and to making the trends of the modern market its own, in terms of format change, new packaging, etc. This has allowed us to develop over time and makes us competitive and successful on today's market, where a change is underway in the organisation of distribution both at the level of large-scale retail trade and the discount channel sector.

fact, these distribution channels favour small and medium sized companies that show great flexibility and ability to adapt to demand. A small medium sized company like Di Iorio succeeds in satisfying at best the of wholesalers demands and distribution in general. Our flexibility is clear in our wide production range, which includes both soft drinks and mineral water, in the availability of the soft drinks in containers of various size, from 500 ml to 2 litres, and in the availability on the market of a large variety of formats, namely the packs of 6, 8, 10, 12, 20 and 24 bottles."

Quality and respect of the environment, wellness and healthy eating "Italian" style, tradition, culture and family: for over 110 years these have been the strong points of the company policy of Di Iorio. How important is technological innovation for your company?

"Our company is located in central-southern Italy, in a context which has been marked by a difficult

the period with closure hundreds of small companies producing carbonated beverages. In the last century, since the post-war period and up to the Seventies, these companies had characterised the production structure of the beverage sector. Di lorio has known how to overcome this period, thanks to the ongoing modernisation of its production installations and continuous technological research. The success both nationally and internationally has also been achieved thanks to the business continuity over the years, which from 1896 to the present has seen the passage of the "testimony" from father to son without any interruption.

We were the first in the world, during the first half of the Eighties, to experiment a new technology in filling beverages with pre-evacuation in soft drinks.

This technology, in addition to having obvious advantages in terms of levels, has above all improved the preservability of the product over time.

This has been the turning point that has driven Di lorio to look for new commercial areas and new foreign markets, first among all the American continent, which has always been a large consumer of carbonated soft drinks.

Importers have particularly appreciated the organisation of Di Iorio, above all for the direct relationship with the company, as commercial intermediaries





are not used. Di lorio has also shown its reliability in offering a product with an excellent quality price ratio, and in proposing a wide range of products which, in addition to the traditional ones, include typical Italian products like bitter, chinotto and rabarbaro. These are products which have been rediscovered by Italians living abroad, but which have also become part and parcel of the uses and customs of foreign families."

The PET bottle of Molisia water, with its innovative image of great appeal, has been awarded with the "Agorà d'argento" for its packaging. What role has the collaboration with SMI played in the success of the new PET formats?

"As regards the new line, a project has been devised with the assistance of SMI, to resolve at best the problems relating to the engineering of the existing glass line". The SMI technical department has redesigned the conveyor system for packaging glass products, making it possible to reach excellent production levels. Management of the format change has been automated,

with the advantage of drastically reducing the machine downtime due to changes in formats the with the possibility to realise a high number of configurations starting from the first format set. As regards the engineering study of the new PET we have succeeded combinina at best each single functional requirement of the bottling system. The performances of the line have been optimised starting from production. the installation of rotary moulder stretch-blow SR14 meets our energy saving and eco-compatibility requirements in full.

The design and manufacture of the new PET containers considered OUL functional, economic and image expectations. The new PET bottles of Molisia water. desianed with preforms of low particle size, are light and respect our environmental policy in full, whilst maintaining an excellent resistance. The graphics have also taken into account the image of our company and its logo. The result obtained is a bottle of great "appeal" that transmits the innovative image of Di Iorio and has allowed us to attain the "Agorà d'argento" packaging award. The graphics on the bottle include all the key elements which distinguish our company: the logo has been reproduced on the top of our bottles, the lines on the body of the bottle, as

elements of reinforcement, represent the mountains; the lily symbolises the typical flower of the Molisa mountains, while the hearts are a decorative element. In the development of this

In the development of this important project it has been of great importance to have a company like SMI, which is also a company rooted in the local territory with a strong commitment to providing technologically advanced machinery.

The working relationship with SMI has allowed us to accomplish this project which, I believe, is the best we could have obtained in of performance, production efficiency, effective warehouse yield, energy saving, reduction overall management costs and optimisation of production process with a reduced number of staff. The PET line uses only three operators, while the glass line is operated by four operators."



